



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/286,794	04/06/99	BAER	M 28076/SV703A

QM12/0606  
MARSHALL O'TOOLE GERSTEIN MURRAY & BORUN  
6300 SEARS TOWER  
233 SOUTH WACKER DR  
CHICAGO IL 60606-6402

EXAMINER	
BLOUNT, S	
ART UNIT	PAPER NUMBER
3726	9
DATE MAILED: 06/06/01	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09286794

Applicant(s)

Baer et al

Examiner

Blount

Group Art Unit

3726

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 5/16/01
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 29-48 ~~is/are~~ pending in the application.
- Of the above claim(s) 39-48 ~~is/are~~ withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 29-38 ~~is/are~~ rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_.

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_ ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 3726

### DETAILED ACTION

1. Newly submitted claims 39-48 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the process of claims 29-38 can be used to make another and materially different product, such as assembling a shaft extension to a shaft that is not associated with a motor shaft.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 39-48 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. The request filed on 4/30/01 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09286794 is acceptable and a CPA has been established. An action on the CPA follows.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 29-38 are rejected under 35 U.S.C. 112 second paragraph for failing to particularly point out and distinctly claim the subject matter which the applicant regards as their invention.

In claim 29, it is unclear how the "end" with a "second surface geometry" <sup>S/E</sup> mates with the first non-circular surface geometry of the motor shaft. Also, "a motor shaft having a first surface

Art Unit: 3726

geometry” is indefinite, as it does not specify where the surface is. One is led to believe it is on the outside of the shaft, however, in claim 32, it is stated that it is a compartment within the shaft.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 29 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 5,749,786 to Pattok.

With regard to claim 29, Pattok teaches motor shaft 54 that has a surface geometry which is non-circular (square, as shown in figure 3), which has a shaft extension 56 that has a surface geometry that is non-circular and that is interengaged with the motor shaft and which has a second end installed into a lower assembly (around members 66 and 68). It is noted that in column 2, lines 45+, “A worm wheel 44 of the shaft assist *electric power steering gear* 18 is rigidly attached to the lower segment 30 of the steering shaft 32...”.

With regard to claim 32, area 76 is a compartment.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3726

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 30-31 and 35-38 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 5,749,786 to Pattok.

With regard to claims 30-31, Pattok teaches the invention as described above, but does not teach the "first surface" to be either hexagonal or square. The choice of the surface shape is a matter of design choice wherein no stated problem is solved or any new or unusual result achieved by having a square or hexagonal "first surface" shape as opposed to some other shape, and it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a hexagonal or square shape as opposed to some other shape in light of the design choice noted above.

With regard to claim 35, official notice is taken that motor shafts and their extensions typically drive devices including pump impellers, and it would have been obvious to one of ordinary skill in the art at the time of the invention to drive a such impeller instead of having it hooked up to transducer in light of this official notice taken.

With regard to claims 36-38, official notice is taken that motor shafts are typically attached to bearings, and it would have been obvious to one of ordinary skill in the art at the time of the invention to have the motor shaft of Pattok attached to one such bearing. It is further noted that powdered metal bearings are well known, as are roller ball bearings.


Art Unit: 3726

9. Claims 33-34 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 5,749,786 to Pattok as applied to claims 30-31 and 35-38 above, and further in view of U.S. patent 3,102,490 to Shiley.

Pattok teaches the invention as described above. Pattok does not however teach tightening a retainer onto the motor shaft. Shiley teaches tightening a retainer 86 onto the motor shaft (see column 3, lines 5+). It would have obvious to one of ordinary skill in the art at the time of the invention to have provided the motor shaft of Pattok with a retainer in light of the teachings of Shiley in order to provide an effective coupling between the shaft and its extension.

With regard to claim 34, the retainer of Shiley is hexagonal and threaded.

10. Steven Blount may be reached at 703-305-0319.

  
S. THOMAS HUGHES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

  
SB

5/28/01